

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Total Metals By EPA Method 200.8

Client ID: M109080  
Date Received: 11/16/06  
Date Extracted: 11/27/06  
Date Analyzed: 11/27/06  
Matrix: Water  
Units: ug/L (ppb)

Client: Alaskan Copper Works  
Project: Metro Self Monitor, PO# M109080  
Lab ID: 611215-01 10x  
Data File: 611215-01 10x.077  
Instrument: ICPMS1  
Operator: btb

Internal Standard:  
Germanium

% Recovery:  
103

Lower  
Limit:  
60

Upper  
Limit:  
125

Analyte:

Concentration  
ug/L (ppb)

Chromium	1,960
Nickel	2,460
Copper	1,410
Zinc	76.5

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	Alaskan Copper Works
Date Received:	Not Applicable	Project:	Metro Self Monitor, PO# M109080
Date Extracted:	11/27/06	Lab ID:	I6-433 mb
Date Analyzed:	11/27/06	Data File:	I6-433 mb.054
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	btb

Internal Standard:	% Recovery:	Lower	Upper
Germanium	102	Limit:	Limit:
		60	125

Analyte:	Concentration ug/L (ppb)
Chromium	<1
Nickel	<1
Copper	<1
Zinc	<1

**FRIEDMAN & BRUYA, INC.****ENVIRONMENTAL CHEMISTS**

Date of Report: 12/05/06

Date Received: 11/16/06

Project: Metro Self Monitor, PO# M109080, F&amp;BI 611215

**QUALITY ASSURANCE RESULTS  
FOR THE ANALYSIS OF WATER SAMPLES  
FOR TOTAL METALS BY EPA METHOD 200.8**

Laboratory Code: 611269-01 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	Relative Percent Difference	Acceptance Criteria
Chromium	ug/L (ppb)	7.02	6.38	10	0-20
Nickel	ug/L (ppb)	<1	<1	nm	0-20
Copper	ug/L (ppb)	<1	1.15	nm	0-20
Zinc	ug/L (ppb)	6.90	<1	nm	0-20

Laboratory Code: 611269-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Acceptance Criteria
Chromium	ug/L (ppb)	20	7.02	143 b	50-150
Nickel	ug/L (ppb)	20	<1	106	50-150
Copper	ug/L (ppb)	20	<1	107	50-150
Zinc	ug/L (ppb)	50	6.90	108	50-150

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Chromium	ug/L (ppb)	20	105	70-130
Nickel	ug/L (ppb)	20	103	70-130
Copper	ug/L (ppb)	20	104	70-130
Zinc	ug/L (ppb)	50	109	70-130

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

**FRIEDMAN & BRUYA, INC.**

**ENVIRONMENTAL CHEMISTS**

James E. Bruya, Ph.D.  
Charlene Morrow, M.S.  
Yelena Aravkina, M.S.  
Bradley T. Benson, B.S.  
Kurt Johnson, B.S.

3012 16th Avenue West  
Seattle, WA 98119-2029  
TEL: (206) 285-8282  
FAX: (206) 283-5044  
e-mail: fbi@isomedia.com

December 5, 2006

**DUPLICATE COPY**

**INVOICE # 06ACU1205-2**

Accounts Payable  
Alaskan Copper Works  
628 South Hanford  
Seattle, WA 98134

RE: Project Metro Self Monitor, PO# M109080, F&BI 611215 - Results of testing  
requested by Gerry Thompson for material submitted on November 16, 2006.

1 sample analyzed for Total Chromium, Copper, Nickel and Zinc  
by Method 200.8 @ \$80 per sample

\$ 80.00

Amount Due .....

\$ 80.00

FEDERAL TAX ID #(b) (6)



## SAMPLE CHAIN OF CUSTODY

ME 11-16-06

AIS

611215

Send Report To

Company

Address

City, State, ZIP

Phone #

Fax #

SAMPLERS (signature)

PROJECT NAME/NO.

PO #

REMARKS

TURNAROUND TIME

☐ Standard (2 Weeks)☐ RUSH

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days☐ Return samples☐ Will call with instructions

Sample ID	Lab ID	Date	Time	Sample Type	# of containers	ANALYSES REQUESTED										Notes
						TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS					
M 109080	01	11/16	2:00pm	H <sub>2</sub> O	1											

Friedman & Bruya, Inc.  
3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Fax (206) 283-5044

FORMS\COC\COC.DOC

SIGNATURE

PRINT NAME

COMPANY

DATE

TIME

Relinquished by:

Received by:

Relinquished by:

Received by:

Samples received at 18 °C

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.  
Charlene Morrow, M.S.  
Yelena Aravkina, M.S.  
Bradley T. Benson, B.S.  
Kurt Johnson, B.S.

3012 16th Avenue West  
Seattle, WA 98119-2029  
TEL: (206) 285-8282  
FAX: (206) 283-5044  
e-mail: fbi@isomedia.com

December 5, 2006

Gerry Thompson, Project Manager  
Alaskan Copper Works  
628 South Hanford  
Seattle, WA 98134

Dear Mr. Thompson:

Included are the results from the testing of material submitted on November 16, 2006 from the Metro Self Monitor, PO# M109080, F&BI 611215 project. There are 3 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl  
Project Manager

Enclosures  
ACU1205R